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ABSTRACT

A report on the technical discussions on continuing education of health personnel and its evaluation, held at the 1979 session of the World Health Organization (WHO) Regional Committee for Europe is presented. For medical practitioners, a wide range of programs and systems is offered, depending on the social and political organization of the country concerned, and upon tradition. Continuing education is sometimes state organized, as an integral part of the service work of the professional, while in other countries it is voluntary. It is suggested that there is a need to define the objectives of continuing education to promote effective planning and evaluation. Continuing education is organized at national, regional, and local levels. It is emphasized that however continuing education is organized, it must be related to working conditions, local requirements, and the existing level of competence. Evaluation is the major problem in continuing education. Either the program of continuing education or the end product may be evaluated. The ultimate end product is the quality of health care, but since this is difficult to measure as a criterion of program success, some evaluation may be made of the effect of the program on participants. It is suggested that there are great advantages in bringing together health professionals from different backgrounds during continuing education. Since continuing education requires the time of teaching staff and participants, it is competing with undergraduate and graduate training. Therefore, it is recommended that closer integration of the three educational components be accomplished. Five background papers that cover continuing education for nurses, midwives, social workers, and environmental health personnel are appended, along with a list of resource persons. (SW)

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Continuing Education of Health Personnel and its Evaluation

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Report on the technical discussions at the twenty-ninth session of the Regional Committee for Europe

Helsinki, 14 September 1979

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CONTENTS

		Page
Introduction		1
Approaches to continuing education – *Professor J. Visakorpi*		2
Report of the technical discussions – *Professor J. Parkhouse*		4
References		13
Annex 1	Continuing education of health personnel and its evaluation	14
Annex 2	Continuing education for nursing and midwifery personnel – *Dr Vassiliki A. Lanara*	27
Annex 3	Continuing education in environmental health – *Professor L.J. Mostertman*	30
Annex 4	Development of continuing education in social work – *Miss N. Kearney*	34
Annex 5	Evaluation: an essential element in planning and implementing a continuing education programme – *Dr T. Fülöp*	36
Annex 6	List of resource persons	42

WHO REGIONAL COMMITTEE FOR EUROPE

Twenty-ninth Session, Helsinki, 11–15 September 1979

TECHNICAL DISCUSSIONS

INTRODUCTION

In the medical sciences, interest in continuing education has never been greater. Large numbers of programmes of continuing education, and related activities, now exist; there is debate about need, method and even value. The cost of continuing education in money and staff time is potentially immense; the difficulties of scientific evaluation are formidable; yet the contribution that it might make to health care could be greater still.

This report gathers together views expressed during the technical discussions on continuing education of health personnel and its evaluation, held at the twenty-ninth session of the WHO Regional Committee for Europe (*1*). The discussions were chaired by Professor A. Maleev, Deputy Minister of Public Health of Bulgaria. Professor J. Parkhouse acted as Rapporteur. Background information was provided in working documents prepared by the Regional Office secretariat and by resource persons in the fields of nursing/midwifery, environmental health, social work and evaluation.

During the discussions 35 persons made statements, reflecting the growing importance attached to the subject. It was clear that the exchange of views could have continued far beyond the allotted time. This review is intended to reflect the main points raised, to show the current lines of thinking and progress, and to appraise some of the many deficiencies in organization, funding, acceptance and assessment of continuing education, as identified in the discussions.

The report is arranged in three parts: an introduction, preliminary remarks by Professor J. Visakorpi on the approaches to continuing education, and the Rapporteur's summary of the discussions. Attached are the working documents and a list of resource persons (Annexes 1–6).

Throughout the report reference is made to other relevant WHO publications including, in particular, the report of the Working Group on Continuing Education of Health Personnel as a Factor in Career Development held in Budapest in 1978 (*2*).

APPROACHES TO CONTINUING EDUCATION

Professor J. Visakorpi[a]

It is useful to begin by emphasizing some of the current issues of relevance to continuing education. This highlighting is important because consideration of the entire subject in depth is beyond the scope of a relatively brief discussion or paper. The question is multidimensional, with at least three important facets. First, continuing education must be seen as an educational process having its own needs in terms of goals, design and evaluation. Second, there are different professions in health care so inter- and intra-professional problems and differences occur. Third, there is the dimension of the relationship between educational and social systems, which is influenced by geographical and cultural differences.

Why should continuing education be discussed now? So much has been written on the subject during the past 15 years that no one could claim it has been neglected. During the past 6 years, WHO has produced at least three stimulating reports on continuing education (*2–4*), and many national committees have considered the organizational requirements. Numerous courses, conferences and seminars have been conducted.

In 1973 a WHO Expert Committee made the challenging comment that although the importance of continuing education is widely accepted, "present efforts in this field are often unsystematic, poorly supported, little influenced by contemporary educational science, episodic, focused more on transmitting new information than on improving competence and only incidentally related to health needs and national health priorities" (*3*). Consequent upon this statement, the Twenty-seventh World Health Assembly, in 1974, called on Member States to consider the development of national systems of continuing education for the health professions, based on national and local health needs and demands (resolution WHA27.31). Now is the right moment to discuss the present situation in different countries in order to see what action has been taken and examine the plans, problems and constraints for future development. Such discussion is essential to compare experiences, good or bad, from nation to nation, and it is especially important because, in spite of the abundance of claims and activities, the real situation in many countries is still as described by the 1973 Expert Committee.

Presentation of a topic usually begins with a definition of concepts. By now, the concept of "continuing education" is fairly clear and widely accepted,

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[a] Dean, Faculty of Medicine, University of Tampere, Finland.

in the form given by the 1973 Expert Committee. According to this, continuing education is the training that an individual physician undertakes after the end of basic education or of any additional education for a career, to improve competence and not with a view to gaining a new qualifying diploma or licence. At this point the distinction between continuing education and advanced further training is not always quite clear. For instance, a nurse may attend a course on a particular aspect of her work, such as the counselling of diabetic patients, which eventually becomes a new specialty with a diploma of its own. This kind of borderline confusion is not serious, if it is remembered that the important first principle of continuing education is that it denotes something needed by every health worker to remain competent in the same job in face of the rapid development of health sciences and health care.

The concept of continuing education, as given above, implies a further principle, the understanding of which is most important for future development, i.e., continuing education must be directed to real practical needs, and be related to the quality of health care rather than the special requirements of professional groups and academic disciplines.

Before this principle of continuing education can be fulfilled, we must be able to establish criteria and standards for health care, and measure its actual quality in a given organization or community. Possibly the most important factor inhibiting the improved organization of continuing education is lack of real proof that it benefits health care. There is a distinction in this respect between continuing and basic education. The output of basic education is clear: training of physicians, nurses, social workers, all ready to serve the system. But what is the output of continuing education? Often, it is seen as increased happiness and personal satisfaction of participants after meeting friends and interesting new colleagues. Of course this function is important, but it cannot serve as a basis for the creation of a systematic educational programme. For this we have to know the real priorities of health care, and hence develop research in this field.

REPORT OF THE TECHNICAL DISCUSSIONS

Professor J. Parkhouse[a]

Background

The growing importance of continuing education for all health professionals is acknowledged because of the rate of development of new knowledge and skills and the speed with which existing knowledge becomes obsolete. There is general agreement about the value of continuing education and, although there are considerable difficulties in providing detailed proof of this value, increasing concentration on the subject is welcomed.

During recent years there has been much thinking and writing about continuing education and three WHO reports have concentrated on this topic (*2–4*). Some of the trends are examined in the background paper prepared for the technical discussions, which was considered to be of great value (Annex 1).

As a framework for the discussions, particular reference was made to the recommendations of the Working Group on Continuing Education as a Factor in Career Development (*2*), which were as follows:

(1) Just as undergraduate and postgraduate training are controlled and administered by academic and other bodies at national, regional and local level, so should continuing education be controlled and organized by appropriate bodies.

(2) Continuing education is needed by all medical practitioners and other health professionals. Although participation may be a factor contributing towards promotion or professional advancement, it is not a means to this end, and advancement should not necessitate movement to a major city, a prestigious specialty, or away from the fundamental task of patient care.

(3) Continuing education should be an integral part of employment. Adequate provision should therefore be made for it as a matter of course, in terms of manpower, study leave and financial reimbursement.

(4) Since the mutual interaction between those who teach and those who learn is vital to the wellbeing of all who work in medicine and the

[a] Department of Anaesthetics, University Hospital of South Manchester, Withington Hospital, Manchester, United Kingdom.

health professions, both undergraduate and postgraduate training should take place in the widest possible range of hospitals, clinics and practices.

(5) An adequate proportion of the health budget should be set aside for continuing education, bearing in mind not only the cost of providing the various forms of activity that are required, but the need for sufficient staff to enable continuing education to take place.

It was also considered useful to review the previously accepted definition of continuing education as "the training that an individual health professional undertakes after the end of basic professional education – or of any additional education for a career as a generalist or specialist – to improve competence as a practitioner and not with a view to gaining a new qualifying diploma or licence" (*4*).

The following comments may be made with regard to this definition.

(*a*) The spirit of continuing education should not, and cannot, be confined to what takes place after basic or specialist training. In spirit, it must be concurrent with both of these since the time scale of professional training makes continual updating and reassessment necessary. The essential attitude towards self-learning and self-evaluation throughout professional life must be developed from the start of basic training.

(*b*) The distinction between continuing education and further training is often blurred. This is because the increase in the scope of practice means that newly developed techniques and knowledge become incorporated into standard teaching: thus, what is continuing education for older practitioners is part of specialist training for those more recently qualified. Also, new specialties may develop through continuing education. It is therefore clear that continuing education may in time lead to the gaining of a new diploma, although not necessarily a "qualifying" one.

(*c*) Continuing education must now be seen as relevant to all health professionals, not only those at senior levels but also technical assistants, nurse aides and other helpers. There are now many participants in health care from other professions, e.g., physicists, mathematicians and engineers, whose role in the health team makes their continuing education equally important.

Present situation

There is considerable activity in this field throughout the European Region, and details are available of many national schemes and administrative arrangements.

For medical practitioners, a wide range of programmes and systems is offered, depending on the social and political organization of the country

concerned, and upon tradition. Continuing education is sometimes state organized, as an integral part of the service work of the professional, and is often linked to promotion or professional assessment. In other countries continuing education is voluntary, although supported in various ways, e.g., by payment of expenses. In some countries, because of their administrative arrangements, there is regional rather than central direction. It is not possible to formulate a single system suitable for all countries.

Much emphasis is rightly placed on continuing education for primary medical care practitioners. There are good examples of programmes organized locally with the cooperation of local consultants and universities. The emphasis must be on involvement of the general practitioners themselves in planning programmes, selecting relevant topics and participating in teaching.

In dentistry, continuing education is a topical concern and the International Stomatological Association has a working party on this question. In one country, for example, courses are now attended systematically over a three-year cycle by about 3000 dentists. Evaluation, however, is a problem.

In nursing and midwifery, the International Council of Nurses stressed the importance of continuing education in 1975. In eastern Europe, programmes are provided for all, with expenses met and with linkage to personal record reviews. In some Nordic countries specific funds are allocated, and in Finland continuing education is mandatory for public health nurses and midwives. Elsewhere, professional nursing organizations are active in promoting continuing education in cooperation with ministries of health.

In environmental health, there are large variations within the European Region because of the different stages of professional development, ranging from services of the "traditional" public health inspector with a wide spectrum of functions to teamwork by highly specialized staff. Continuing education requirements vary accordingly. The education must often be directly related to local working conditions, but since many professionals work alone or in very small teams, they must also be brought to special centres. It is also necessary to teach in preparation for rare events which may never occur, e.g., major disasters such as earthquakes and epidemics. Simulation is an important feature of continuing education. Some countries, such as France and the Federal Republic of Germany, have full-scale training centres capable of simulating all possible situations. There is increasing awareness of environmental influences on health care, and continuing education can make workers more self-reliant and capable of forming sound professional judgements in the face of powerful influences such as commercial pressures and claims. The medical profession has a clear responsibility in the continuing education of qualified nonmedical workers in this field.

In social work, the major problem is to provide further training, particularly for the many unqualified and unregistered workers. This is especially difficult for those who work in isolation and where roles are not clearly understood. Various patterns of courses have been developed; summer and

six-month courses appear to be feasible but those of one year create difficulties in releasing staff from work. In this field, the distinction between continuing education and further training is particularly difficult to draw. There is ready acceptance of the courses provided because social workers have tended to be taught to regard themselves, on qualification, as being only at the beginning of their training.

For other health workers, such as medical laboratory technicians, physiotherapists, radiographers, pharmacists, dietitians, chiropodists and opticians, continuing education is equally important, although there is wide variation in the development currently taking place. For some groups, such as medical laboratory technicians, many well-organized courses are available. Other professions are equally aware of the need but there are often difficulties in finding time for participation, which may mean loss of earnings in a private system, and in convincing employers of the importance of the training. Support is urgently needed at national levels in developing continuing education in these health professions and stressing its importance in relation to the raising of standards of practice.

Methods used

With the vast development of educational technology, the methods available for continuing education are numerous. In short, they range from private reading of books and journals, and informal discussion with immediate colleagues, to full-scale international conferences and the highly sophisticated use of television and other media.

Wherever possible, continuing education must be provided at the place of work and must be relevant to the immediate needs of the health professional and the community he serves. But there are also advantages in attending courses and meetings away from the place of work; one great benefit of a period of such training is the change in attitude that it may create with a new awareness, for example, that the claims made for the latest drugs and equipment are not always borne out by careful clinical assessment.

Objectives

The primary purpose of continuing education is to make health professionals more competent in their existing employment. It is not to improve chances of promotion. In particular, there must be adequate incentives, linked to continuing education, for the health professional to remain in contact with the patient, and particularly with those sectors of the community in most need of good health care, rather than being drawn away into administrative work as he or she becomes more senior. A clear sense of priorities in this regard is often lacking at present and much continuing education must be unsuccessful in its primary purpose unless adequate

promotion prospects and rewards are provided for those who continue to work with patients in the field.

There is a need to define the objectives of continuing education since, unless these are specified, the planning of programmes and their evaluation becomes extremely difficult. Nevertheless, there are often practical difficulties in specific definition of objectives, since a given programme may have various "spin-off" advantages in addition to its prime purpose. Broadly speaking, continuing education should give new knowledge, renew knowledge and introduce new attitudes and skills. There is a particular difficulty in defining its scope in newly emerging specialties, such as community medicine, where standards still have to be set. It is also necessary to relate the objectives to the existing level of knowledge and competence, for example where nonqualified workers are employed – and need to be further trained – alongside qualified workers.

The ultimate purpose of continuing education is to provide improved health care. This principle must always be remembered. However, health care is provided by professionals, so that the wellbeing of health workers is ultimately inseparable from the wellbeing of the community. To this extent, the distinction between whether continuing education is for the benefit of the recipient, or is a means towards the provision of better health care, is artificial. There must always be full discussion with potential participants in the training provided to ensure its relevance and proper relationship to the realities of practice.

Organization

Continuing education is organized at different levels: national, regional, local. Arrangements vary according to countries. At national level, the responsibility may rest with a special institute and this may be helpful in coordinating programmes throughout the country. Elsewhere, the primary motivation may come from the professionals themselves, and more difficulty may be encountered in obtaining necessary resources.

It has already been stressed that, however continuing education is organized, it must be related to working conditions, local requirements and the existing level of competence. The emphasis must be on participation, i.e., directly involving the recipients in as many ways as possible rather than treating them as a passive audience. Those who seek and require continuing education are mature and busy practitioners; they must not be treated as children, and boredom is inexcusable. This emphasizes the need for the highest possible quality in the organization and provision of continuing education. There is no place for mediocrity. Professionalism is required in teaching and in communication.

In some countries a large amount of continuing education activity takes place, and there are anxieties about there being too many courses and too

frequent attendances. Here, it is important to select appropriate programmes and to control the number of attendances permitted, in the interests of the individual concerned and his immediate colleagues. The prime advantage of having a choice of courses available is that this tends to maintain high standards of quality, since poor or indifferent courses will fail through lack of support.

In many countries it would be helpful to review the current organization of continuing education in order to see where governmental help, with legislative backing if necessary, could be of benefit.

Evaluation

Evaluation is the major problem in continuing education. It is often necessary to start with low expectations, on the basis that some form of evaluation is preferable to none. Simple means of evaluation, capable of providing a rapid assessment, can certainly be helpful. Once this is achieved, thought may be given to more sophisticated methods.

Either the programme of continuing education or the "end product" may be evaluated. The quality and relevance of the programme must constantly be checked by enquiry. The ultimate "end product" is the quality of health care, but it must be admitted that it is often not feasible to measure a change in this as a criterion of the success of a programme. In default, some evaluation may be made of its effect on participants, as an intermediate "end product". In many countries this is a sensitive topic since professionals, particularly at a higher level of seniority, may be justifiably anxious about a form of personal evaluation not related to a professional examination and furnishing results which may become known to colleagues. Privately, however, such evaluation is needed, more particularly in a system where continuing education is voluntary, because the most vulnerable practitioners may often be those who do not perceive a need for it in their own case.

Wherever possible, evaluation should be on a continuing basis, so that the effects of continuing education can be assessed over a period of one or two years or more. There are considerable problems of "control" in this respect. Altogether, the funadmental question of how to evaluate continuing education requires coordinated research on an international basis.

Initiatives are needed in organizing evaluation at various levels. The WHO Regional Office for Europe should stress its importance in all relevant publications and meetings. All programmes should be evaluated, and this should not be a mere "paper exercise" but a meaningful process. All new teaching techniques and materials, as they are advocated, should be assessed in relation to the possibilities they offer for evaluation. Particular difficulties are often experienced by those countries which do not normally use one of the working languages of the Regional Office. Additional help should be provided where necessary. At government level, support is needed in ensuring

recognition of the principles of evaluation and providing resources. At regional and course levels there is a great need to evaluate teachers and course organizers, since the quality of their performance is vital. For participants the importance of self-evaluation must be stressed. Increasingly advanced techniques are becoming available for this purpose, which circumvent many objections to open or public evaluation and enable the professional to combine self-learning with self-assessment.

The difficulties of evaluation underline the urgent need to strengthen health care research in order to identify more clearly both the problems of health workers and the needs of society, so that the relationship between them can be better understood.

Multiprofessional continuing education

There are great advantages in bringing together health professionals from different backgrounds during continuing education. By working and learning side by side, better understanding can be achieved of each person's role, level of competence, aspirations and potential contributions. Many communication barriers can be broken down. There are practical difficulties in organization because of different starting-points of attitude, knowledge and skill, but these can be overcome. Good examples exist in the provision of courses in dentistry and in management and administration for hospital physicians.

There is a danger of hoping for too much from multiprofessional courses. In translating the lessons of a programme to better teamwork on the job, the problem is often not so much lack of knowledge but inability to apply it to the overall problem of health in the community. Ideally, a spirit of interprofessional collaboration should already exist, where it does not, continuing education makes a valuable contribution.

Resources

The provision of resources for continuing education depends upon the organization that has evolved in the country concerned. Provision for updating and extension of knowledge as a condition of employment may be determined by labour relations legislation, while actual entitlement to time for such study may depend upon health legislation.

Frequently the major constraint on resources is not so much money as time. To be effective, continuing education requires the time of teaching staff and participants. In this respect it is necessarily competing with undergraduate and graduate training. Much benefit would arise from closer integration of the three phases of professional education with, for example, much wider use being made of country hospitals and other traditionally "non-teaching" institutions at both undergraduate and graduate levels. This movement would

be particularly valuable to those hospitals that currently have no tradition of training, for example of nurses, and where continuing education is not therefore accepted as part of the normal course of events.

Ultimately a new balance is required between undergraduate, graduate and continuing education. Time will favour continuing education in this regard. For example, it is generally accepted by medical educators that it is no longer possible to teach a physician everything by the time he qualifies. It is now furthermore beginning to be realized that it is not possible to teach a specialist everything by the time he completes his graduate training. More and more training and advanced specialization will inevitably come to belong to the continuing education phase, so that the basic and specialist training of health professionals can be made as concise as possible and thereafter people can continue to learn and develop while they serve the community. Governments and professional organizations can help greatly in encouraging this movement, and it is worth noting that some countries already allocate a specific proportion of the health budget for continuing education.

Motivation

It is unlikely that compulsory re-licensure will in the foreseeable future be welcomed, or regarded as an appropriate incentive towards participation in continuing education, within the European Region. If re-licensure is to be made dependent upon continuing education then the linkage must either be through attendance or some form of assessment. Mere attendance at courses does not, however, imply participation nor does it guarantee learning or improved performance. Forms of assessment include testing by examination, practice evaluation and/or some more direct study of impact on the quality of health care. In view of the existing "state of the art" there are justifiable concerns about each of these alternatives, some of which carry a heavy cost burden.

There is no doubt that the proper motivation towards continuing education is a desire to provide better health care and give a higher quality of personal performance. This is rightly regarded as a prime responsibility of all health professionals. The obligation to maintain competence is a personal responsibility and is, for medical practitioners, embodied in the spirit of the Hippocratic oath. A true spirit of continued learning and self-evaluation should colour every aspect of professional education from its very beginning. The concealment of ignorance should have no place in teaching, learning or practice – a principle which may be hard for some teachers and practitioners to accept.

Motivation to participate in continuing education can be increased by ensuring that only the highest quality of programme is provided. This point requires re-emphasis because of the disillusionment that may result from

poorly organized and irrelevant teaching. Courses and programmes should never be seen merely as a means of enabling practitioners to comply with a statutory requirement.

The greatest need for continuing education often arises among those who have the greatest difficulty in obtaining it. This applies particularly to isolated and single-handed professionals. Such professionals are often heavily overworked and have relatively low status and remuneration. Recruitment to such posts is difficult, so that those who occupy them are required for service whether they remain fully competent or not. The greatest help towards motivation in this case is to provide better status and better remuneration for such "first line" positions and thus raise their popularity. It is here that the real challenge of continuing education exists, and also the challenge of improved health care. The idealistic principles which have now so often been enunciated in relation to continuing education, and its potential benefit to the community, can be made into realities only when the right conditions exist in terms of status and financial reward for those who serve where they are most needed.

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Annex 1

CONTINUING EDUCATION OF HEALTH PERSONNEL AND ITS EVALUATION[a]

Synopsis

The continuing education of health personnel was viewed by the Twenty-seventh World Health Assembly (resolution WHA27.31) as an integral part of the total health and educational system. Its cardinal importance to health authorities in assuring the quality and coverage of health services was underlined. As a matter of urgency Member States were requested to develop national systems of continuing education based on national and local health needs and demands, integrated with health care and educational systems.

The Regional Committee for Europe (EUR/RC27/R8) decided in 1977 to make "Continuing education of health personnel and its evaluation" its topic for technical discussions in 1979. The preparatory document introduces different facets related to the existing situation concerning the continuing education of various types of health personnel in the countries of the European Region. It does not, however, attempt to present a thorough review of the existing situation; its primary purpose is to provide an introduction to and guidelines for the technical discussions.

For this purpose an attempt is made to describe some of the existing policies, organizational structures and educational planning of continuing education in European countries. The problem of interprofessional continuing education has been stressed as an opportunity for members of health care teams to learn together how to solve problems in which all have a common interest.

Constraints on and incentives for participation in continuing education have been reviewed. Finally, the importance of constant evaluation as an integral element of all continuing education activities has been underlined, with a view to increasing efficiency and effectiveness.

Introduction

The rapid development of medical knowledge and the numerous changes taking place in methods of delivering health care have made the continuing education of health personnel an issue of critical importance. Continuing education is essential in every country if the maximum benefit is to be obtained from the initial investments made in basic education or training.

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[a] Background paper prepared for the technical discussions at the twenty-ninth session of the WHO Regional Committee for Europe.

There are various methods of planning and conducting programmes in continuing education, which is now being provided for a large number of health professionals, primarily physicians and nurses. A working paper presented at the Working Group on Continuing Education of Health Personnel as a Factor in Career Development, organized in Budapest in October – November 1978 by the WHO Regional Office for Europe, sums up the situation as follows:

> "During the 1960s and 1970s there has been increasing agreement about several basic concepts regarding the education of health professionals. It has been recognized that currently technological and scientific skills, taught as a major component of training programmes, have a relatively short 'half-life' and need reliable renewal and replacement at regular intervals, and that such skills are enhanced by reassessment and retraining. In short, it has been realized that no system of education, however high its quality, can guarantee that its graduates will remain highly competent indefinitely. Not only may knowledge or skills be forgotten or outdated by new developments, but those needed by the health professional may be altered by changes in social circumstances, disease and disability patterns, health care delivery systems and patient expectations. . . .
>
> In 1973 a WHO Expert Committee emphasized that though the importance of continuing education was widely acknowledged, existing efforts in the field were 'often unsystematic, poorly supported, little influenced by contemporary educational science, episodic, focused more on transmitting new information than on improving competence, and . . . only incidentally related to health needs and national health priorities'. The Twenty-seventh World Health Assembly called on Member States to consider as a matter of urgency 'the development of national systems of continuing education for the health professions, based on national and local health needs and demands, integrated with health care and educational systems, with full utilization of the resources of universities and schools of health personnel'."

Considerable efforts have been made to provide continuing education for physicians, WHO being one of the prime movers in this field. What is now needed is evidence that continuing education has altered or improved the administrative, educational or service sectors in health care delivery, especially in the field of primary health care.

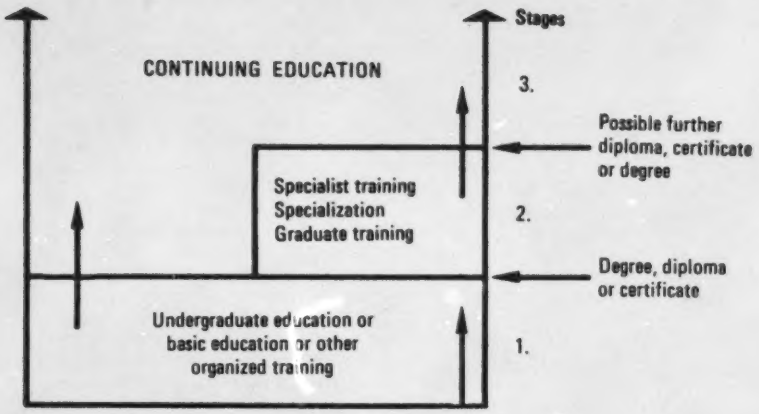
Definition

The education and training of health professionals may be presented as shown in Fig. 1.

The terminology used differs between countries and professions. While Stage 1 of this educational process is fairly uniformly understood in Europe and includes the years spent in an educational institution after leaving secondary school, Stage 2 is often interpreted in two or three different ways. In some countries, the term postgraduate education is used as a synonym for continuing education; in others it may refer to any education after the completion of a basic programme, including specialist training.

For this reason it is necessary, in order to achieve a common understanding, to accept the definition of continuing education arrived at by

Fig. 1. Stages of education for health professions



the WHO Working Group on Continuing Education of Health Personnel, held in Dublin in October 1976:

> "Continuing education [is] the training that an individual health professional undertakes after the end of basic professional education – or of any additional education for a career as a generalist or a specialist – to improve competence as a practitioner and not with a view to gaining a new qualifying diploma or licence".

On the basis of this definition, continuing education (Stage 3) begins either immediately after graduation from medical school or after a formal programme of advanced training leading to specialization. Moreover, any education that leads to a further qualification or to a further step in specialist training should not be included in the term "continuing education" (see Fig. 1). Thus, continuing education should be regarded as an integral part of, and in fact a subsystem of, medical education as a whole; it should be directed towards real practical needs and be related to the quality of health care rather than to the special requirements of professional groups and academic disciplines. Furthermore, it should be based on the needs of the learner (themselves based on the needs of the community) and not on the needs and interests of the teacher.

Scope

Continuing education is a necessary part of the professionally active life of all health professionals. Its scope therefore includes all the professions associated with the different systems of health care delivery.

Continuing education may take many forms: organized courses, workshops, conferences and large professional meetings are only some of its aspects. In addition, it includes self-education; clinical work; activities carried out through professional societies; material presented in journals and other publications; discussions with colleagues, consultants and other senior specialists; and information supplied by the drug industry and drug control agencies. The general emphasis is on maintaining and extending professional competence and effectiveness, not merely on acquiring knowledge.

In hospitals continuing education is almost an inbuilt feature of everyday activities and is available to all who wish to keep abreast of the expanding body of knowledge. Although some attempts are made to extend continuing education to those in general practice, much has still to be done to offer activities that touch on all aspects of the work of physicians, dentists, pharmacists and other health personnel.

Continuing education is equally necessary for public health medical officers and courses should be relevant to their specific needs. Other groups of health personnel, i.e., health educators, school and occupational health experts, the nursing profession and medicosocial workers, have access to continuing education in different degrees.

Analysis of the situation

In 1976 the Regional Office for Europe obtained baseline information on the current status of continuing education, primarily for the physician.

Policies on continuing education

Very few countries have any carefully devised plan to provide practitioners with education that is both systematic and continuous. In most countries continuing education seems to consist of a number of unrelated courses offered by independent agencies. While each of these may in itself be valuable, it would be incorrect to assume that together they form a comprehensive programme.

In some countries it is the responsibility of the government to delegate the organization of continuing education to central educational organizations, such as institutes of postgraduate or postbasic education for physicians and other health professionals. Such continuing education, usually supervised by the ministry of health, is organized in the light of health needs. The expenses are met by the state and personal records of health personnel are reviewed to verify regular attendance at the course offered. This situation applies in eastern European and some of the Nordic countries of the WHO European Region.

In other countries, where continuing education is not government-controlled, it is usually organized by professional associations, directors of

hospitals or medical school departments or by professionals responsible for junior staff. Various stipulations have been laid down by professional associations regarding attendance at continuing education courses; sometimes an incentive factor is also involved.

In both of the situations described above the trend is towards closer involvement in the organization of continuing education on the part of the professional bodies which confer, withhold or withdraw licences to practise. Sometimes organizational tasks are identified with a view to improving the existing structures for continuing education.

Organizational structure

As indicated in the report of the 1976 Dublin Working Group, the organizational structure of a continuing system shows different patterns:

> "While organizational arrangements cannot in themselves solve functional problems, they can serve to make solutions easier or for that matter more difficult to achieve. For an approach to continuing education such as that recommended in this report to be carried through, certain organizational developments are an essential prerequisite. In view of the wide variation in political, health care and educational systems within the European Region, no single scheme or pattern can be appropriate under all circumstances".

Although it is unlikely that the same organizational arrangement for continuing education will be appropriate and acceptable in all countries, the creation of an organization to link the health services delivery system, the educational system of the health professions and the profession itself is indispensable. The health service system must be involved because it carries responsibility for planning as well as delivering the preventive and curative health care whose improvement is the main purpose of continuing education. The educational system of the health profession must be involved since continuing education is merely one phase of the learning process for which this system is responsible. The profession must be involved since it is essential that the learners should help identify the educational objectives, select the instructional devices and assess the effect of the programme on ultimate performance.

The organizational arrangement must be more than a nominal affiliation of these groups. It must also do more than coordinate their independent activities, although coordination will be an important function. It must, in fact, be an agency that has both responsibility and authority for planning and the allocation of educational resources.

In some countries this may be best accomplished through separate institutes operating under the ministry of health with the full support of the medical profession. While this system has functioned successfully in this setting, the separation of such institutes from the universities, which are responsible for other sectors of medical education, may not in other countries be in the best interests of a comprehensive and systematic plan.

Alternatively, the agency might take the form of a national commission that derives its authority and responsibility from the government with the consent, cooperation and involvement of the other component groups noted earlier. In other countries, it may be organized through a national health service that not only provides comprehensive health care but also has a duty to advise the government on the allocation of resources.

The future organizational planning of continuing education should include the following aspects:

(*a*) response to the changing pattern of health care needs and the needs of health care administration;

(*b*) response to advances in knowledge and techniques in the relevant disciplines;

(*c*) provision for interest and participation in continuing education;

(*d*) recruitment of the best personnel and edu ational resources for continuing education programmes;

(*e*) a consideration of feasible and reliable methods for evaluating continuing education.

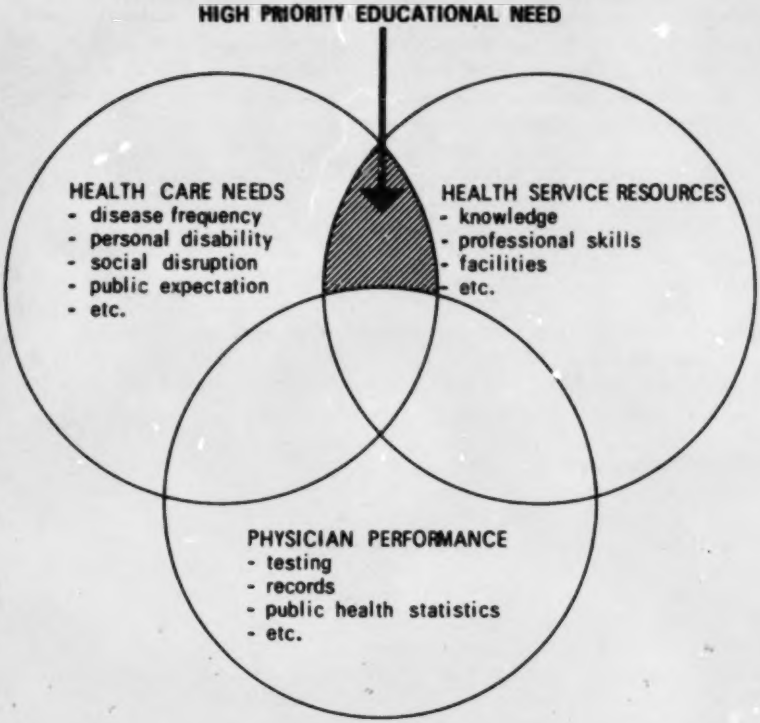
Educational planning of continuing education

Since the ultimate purpose of continuing education is to improve the quality of preventive and curative care given by health personnel, the definition of objectives for any such programme should emerge from a systematic study of existing health care patterns and needs of health services and communities. Such information can be derived from national public health statistics or by regional, local or individual identification of the health problems most frequently encountered. The act of identifying these needs is in itself the first stage of systematic continuing education.

Unfortunately, programme objectives too often do not take into account the real needs of the health services but are rather a manifestation of the views held by health workers, university staff or administrators concerning those needs. Whatever the national priorities or health needs are, it is clearly necessary to do more than inform health professionals about these problems if the care they provide is to be influenced significantly.

Such a systematic approach requires a new attitude towards the nature and purpose of continuing education on the part of both those who provide it and those who participate in it. It also demands full cooperation between those providing education for the health professions and those providing the health services, as it implies that continuing medical education should

Fig. 2. Development of priorities in continuing education



The shaded area represents health care needs that are not being adequately dealt with by practitioners despite the existence of suitable health service resources.

reflect national health priorities and should be consistent with national health plans. If attention is focused upon major health problems whose resolution would benefit large segments of society less time will be devoted to scattered attacks upon smaller problems of less importance to society as a whole, although these may often be of more immediate concern to special interest groups.

Adults seek independent learning, not dependent instruction, something that is personally meaningful, not merely institutionally required. Hence

continuing education should mean continuing self-education, not continuing instruction. It demands a significant measure of self-reliance, a shift away from preoccupation with courses and methods towards an intensified concern for educational diagnosis and individualized therapy.

For these reasons, it is particularly important that health professionals should be involved in the selection of instructional methods for programmes aimed at practical problems they face and in whose identification they have participated. The methods should provide opportunities for them to become actively involved in the process of learning rather than being passive recipients of the learning of others. One valuable method that meets these requirements, but is still not sufficiently employed in continuing education, is the process of self-evaluation. This can help health professionals discover what they need to learn as well as the progress they have made after a programme of further study. While self-evaluation is usually thought of in terms of tests of knowledge, such developments as the medical self-audit also provide a mechanism for looking systematically at individual performance in the consulting room, clinic or hospital ward.

Greater emphasis should be placed on the development of such tools for personal education diagnosis in continuing education, even at the expense of curtailed investment in the further development of the more elaborate instructional methods.

Interprofessional education programmes

Interprofessional education should not replace programmes for individual health professions, but should offer a new opportunity for members of health care teams to learn together how to solve problems in which all have a common interest.

One general goal of such programmes is to give each member of the health team a better understanding of his role and of his relation to other members of the team, in tackling a particular task.

There are several problems to be overcome in the field of interprofessional continuing education. First, the members of the different health professions must recognize the value of working together to define and solve the health care delivery problems.

Secondly, the team approach to health care should be emphasized during the basic education of each of the health professions, so that each member of the health team may begin his or her career with an understanding of the roles of the other team members.

Thirdly, there is a need to establish a common language or a common frame of reference so that interprofessional discussion can be meaningful.

Fourthly, individual Member States and existing professional organizations and societies should be encouraged to foster interprofessional educational programmes for demonstration purposes.

Every effort must be made to foster the idea that improvements in health care can be achieved more effectively when different health workers learn together.

Stimulation to participate in continuing education

Self-motivation is fundamental. The development of personal responsibility to achieve and sustain competence is essential for the practice of all health professions.

The right attitude to lifelong learning must be developed and encouraged from the beginning of basic training or education.

It seems clear that any solution to the long-term problem of continuing education must begin during the early years of basic education. Despite frequent reports that students are not sufficiently motivated, it seems that in most cases the main problem lies not with students but with the teachers, who must modify their curricula and teaching methods in a manner that will provide positive inducements to learning. The means of accomplishing this should include a greater emphasis upon, and reward for, independent study; reduction in the amount of formal instruction and less dependence upon the lecture method; more opportunities to use alternative methods of learning; greater encouragement of students to identify significant health problems and to seek solutions through personal study in the library, the laboratory or in the field.

The pressing issue is arranging continuing education for health professionals who were trained in an educational system that was not designed to establish an individual commitment to continued lifelong learning. It remains, therefore, to identify the inducements, both positive and negative, that may be useful during the individual's professional career. Contact with colleagues and students provides a powerful motive and the greatest problems are met by those professionals who work in relative isolation.

Opportunities for continuing learning are more likely to be used if the rewards include something more than personal satisfaction and heightened self-esteem. If society is to derive benefit from any increased professional competence that results from continuing education, then it also has a role to play in providing incentives and rewards. The most tangible rewards are, of course, monetary rewards and in some countries these may be appropriate. However, financial reward has disadvantages in terms of motivation and may lead to uncritical attendance at poor-quality courses. The relationship between attendance and improved competence is not sufficiently well established to justify this as the only solution for adjustment of remuneration. Other methods worthy of consideration include: (1) public acknowledgement of new achievement; and (2) giving health professionals academic rank and teaching responsibilities based on professional performance rather than research.

Whatever the reward system, it should be based upon performance, not merely upon evidence of participation in some presumably worthwhile educational programme.

One of the inducements that has been widely discussed is the establishment of an obligatory requirement to participate in continuing education for specified periods in order to maintain a legal right to practise, to continue membership in a professional association or to gain professional advancement.

An obligation to demonstrate competence shifts the emphasis from documentation of participation to documentation of learning and allows each health professional to decide the way in which the goal is to be achieved.

The recommendation that competence, rather than time, should be the criterion for continuing education leads to a dilemma in deciding how that competence should be assessed and at what intervals. Society has a right to expect that the competence of phsyicians will be reassessed and recertified periodically.

In contrast to the situation in the USA, where relicensure becomes more and more a mandate laid down by state or professional associations and is mostly connected with attendance at certified or approved continuing education courses, European countries seem to be rather reluctant to impose relicensure.

The question that remains unsolved is whether there is now a need for some external recertifying mechanism, carried out after fixed, although arbitrary, periods and continued until a system of self-evaluation more consistent with the principle of personal responsibility for lifelong learning can be established and proved effective. Ultimately society will demand evidence of professional competence, not merely an assurance that it is being achieved. Since a single system cannot at present be recommended, all continuing education authorities should make self-assessment a main component of their programmes and use every possible incentive to encourage all physicians to participate in periodic evaluation of their own professional competence. Such an assessment should then form the basis of their subsequent continuing education efforts.

One of the most promising contibutions to the solution of this problem is the type of continuous self-assessment described earlier. This may be carried out by individual physicians and groups. When self-assessment is carried out effectively, under the guidance of skilled personnel, practitioners are assisted in finding ways to correct identified deficiencies. Considerable progress is now being made in some countries by professional groups in analysing the tasks that physicians must be able to carry out. The performance and assessment devices identified can be used as part of such a continuous learning programme.

Another way of doing this is to impose "minimal standards" as a prerequisite for obtaining a licence or a renewal thereof. In the field of medical

specialties, this could be possible if and when such standards are laid down. Finland has made a start in this respect by recommending such a procedure for certain diseases.

The purpose of such procedures is to draw attention to the realities of an individual practitioner's work, to enable him to assess his educational needs and, by means of continuous evaluation, his progress. These methods provide positive rather than negative inducements to learning.

Many physicians point out that their first obligation is to provide medical care and that the ever present demands of patients constitute the principal impediment to their own continuing education. In fact, it is true that most physicians do carry a heavy load and work long hours and it is unrealistic to expect many of them to add continuing education to that load. This problem may be solved more easily in those countries with a national health service and in which physicians are paid employees, and time for continuing education can be built into the normal work programme, than in those countries where practitioners work independently. In both these systems the national authorities must make provision for continuing education; unless time can be made available, continued learning will be difficult for many and virtually impossible for some.

Evaluation

Although evaluation of continuing education programmes is generally regarded as essential, it is clear that such evaluation is at present generally inadequate, though all agree that continuing assessment should become an integral element of all continuing education activities.

It must be asked how much has been done so far to assess the different continuing education activities, to determine their learning objectives, to search for better relevance and course evaluation and to quantify, if possible, the impact of continuing education on the standard of health care delivery.

The different aspects of evaluation can be grouped under the headings of educational process and educational product.

Evaluation of the *educational process* requires investigation of (1) the way in which programme objectives were derived and specified; (2) the relevance of such objectives to health care needs; (3) the appropriateness of the programmes and instructional methods; (4) the skill with which the instructional methods were employed by the teachers; (5) the extent to which evaluation data were employed to improve the programme.

Evaluation of the *educational product* involves primarily an assessment of whether the objectives of the programme were achieved. Since the general aim of continuing education is to improve the quality of preventive and curative health care, through maintaining or improving professional competence, it is not sufficient simply to determine whether participants acquired new knowledge. The far more difficult but ultimately essential

task is to determine the extent to which the educational process influences the preventive and curative care they provide.

A wide range of techniques is now available and the task is to select those most appropriate to the specific educational objectives; no single method can be regarded as the best method for all situations.

Evaluation should be performed by the teachers who planned and carried out the programme of continuing education and they must continue to play a part in both process and product assessment.

Personal evaluation carried out by the individual learner is most important in continuing education since the opportunity for self-assessment is always present and the feedback can be immediate.

The principal use of evaluation data in continuing education should be to facilitate further learning, not simply to make judgements about whether some arbitrary standard has been achieved. Just as information accumulated about the educational process should be useful to programme planners in making future efforts more effective and successful, so should individual performance data be employed to assist practitioners in delivering better preventive and curative health care.

As most physicians have been educated in a system in which they have been rewarded for concealing deficiencies rather than revealing them, any significant change in attitude will require careful encouragement.

Much could and should be done to study the impact of specific topic-oriented programmes of continuing education on subsequent patient management and attitudes to health care. However, the problem of evaluation is complex. A substantial part of the value of continuing education is nonspecific and a great deal of professional and informal self-education cannot easily be identified. To demand comprehensive evaluation as a prerequisite for expenditure on continuing education would be unrealistic. It must be accepted that continuing education is expensive in terms of teaching costs and the time of participants, but that it is of value in a variety of ways. This does not excuse the failure to undertake evaluation where this is practicable.

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Annex 2

CONTINUING EDUCATION FOR NURSING AND MIDWIFERY PERSONNEL

Dr Vassiliki A. Lanara[a]

Nursing is traditionally considered to be the major *caring* profession, embodying humanistic, artistic and intellectual components. Nursing bears a unique responsibility for assuring a holistic, and yet personalized, approach to the individual, the family and the community. It is, however, a difficult and demanding profession because it deals mostly with pain and suffering. Nurses work either in hospitals and other health institutions or in the community, for example in health centres, schools and industry. In each setting the nurse is striving, with other health workers, towards the maintenance and promotion of health, or towards health restoration and rehabilitation.

The Constitution of the International Council of Nurses calls for: the full development of human being and citizen in every nurse, which shall enable her to bring her professional knowledge and skill to the many-sided service that modern society demands of her. Continuing education has a role to play in the fulfilment of this aim, and the Council adopted a resolution on the subject in 1975. Recognizing that "no system of education however high its quality can guarantee the confirmed competence of its graduates"[b] continuing education for nursing and midwifery personnel is considered imperative. Not only may knowledge and skills be forgotten, but they may also become outdated by new developments in science and in hospital and health technology. Moreover, the expectations and demands of patients are very high in terms of quality of services. Nursing itself changes too. Recently, the whole philosophy of nursing has shifted towards the concept of health care rather than the more curative aspects, but of course the core of nursing is, and should remain, the care of the individual, healthy or sick, who is in need of services as well as the care of the family and the community.

Continuing education consists of systematic learning experiences designed to build upon pre-service knowledge and skills. It involves active participation

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[a] Associate Director of Nursing Services, Evangelismos Medical Centre, Athens, Greece.

[b] **WHO Regional Office for Europe.** ***Continuing education of health personnel as a factor in career development.*** Report on a WHO Working Group, Copenhagen, 1979 (ICP/MPM 001).

of both teacher and student. In other words, it requires both the provision of an organized, planned programme and an independent endeavour on the part of the learner. Continuing education should provide nursing and midwifery personnel with the opportunity to learn new knowledge and skills, to review and add to knowledge already gained, to investigate new approaches and to strengthen clinical competence. Thus, it encompasses all forms of effort aimed at enabling the nurse or midwife to provide better care for the consumers of today and tomorrow.

Present situation

The existing arrangements for continuing education of nursing and midwifery personnel in Europe vary between countries. Eastern European countries have continuing education systems for all health personnel, including nurses and midwives, which are organized and supervised by the ministry of health. Personal records of staff are reviewed to verify regular attendance at the courses offered. Some of the Nordic countries have continuing education programmes for nurses and midwives, organized by the ministry of health or equivalent body, which allocates specific funds. In Finland, continuing education is required, by government decree, for public health nurses and for nurse/midwives. In other countries, including Greece, professional nurse associations belonging to the International Council of Nurses, in cooperation with the ministry of health and other ministries, are active in promoting continuing education for all categories of nursing personnel through well-constructed programmes.

However, responsible health professionals cannot be satisfied with the existing continuing education programmes for nurses and midwives, or even for other health professionals, in the WHO European Region. Do we really ensure quality of care? Are the programmes effective? Are they adequate, systematic, well-planned and related to improvement of performance? Do they meet the needs of the practitioner? How are they evaluated?

Many factors in different countries contribute to the inadequacy of continuing education programmes for nurses and midwives, such as:

(1) the right attitude of mind to understand the need for continuing education is not always cultivated during basic and specialized nursing training;

(2) programmes are inadequately planned and put into operation;

(3) funds are unavailable;

(4) there is shortage of nursing personnel;

(5) no well-established reward system exists for continuing education, since it is not a requirement for career development, relicensure, or other relevant purpose.

Aims

It is now estimated that the half-life of science and technology relevant to nursing care is between three and five years. Therefore it is more than ever necessary for nurses and midwives to renew their knowledge and to re-orient and synchronize their practice through continuing education.

In the field of nursing and midwifery the aim should be a continuing education system which is:

- integrated with the health and educational systems of the country
- compulsory for all categories of nursing personnel
- financed by the allocation of specific funds
- supported by the assignment of personnel with specific responsibility
- included within the regular schedule of work, or attracting overtime payment
- providing rationally developed programmes at national, regional and local levels
- planned to maintain, extend and improve competence and performance, and thus to assure and improve quality of care
- linked with a reward system
- planned to function within the profession as well as in association with other health professions
- based on a systematic study of existing patterns and needs of health care, carried out for each country in order to establish objectives
- developed in coordination with other continuing education programmes in the WHO European Region.

Nurses and midwives, like all health professionals, have the privilege of serving human beings, and human beings are of paramount value. Therefore the work they perform should be of high quality. Mediocrity is incompatible with health care.

Nurses are responsible for assuring the quality of health services, on behalf of people. There are four million nurses in the European Region, representing two-thirds of the world total. We need to capitalize on the investment we have made in the education of nurses by keeping up their competence through continuing education both intraprofessionally and interprofessionally.

Annex 3

CONTINUING EDUCATION IN ENVIRONMENTAL HEALTH

Professor L.J. Mostertman[a]

Manpower in environmental health

Manpower needs for environmental health are very diverse because of the wide scope of activities necessary to maintain an optimal living and working environment. These relate to: water supply; waste management; atmospheric pollution control; inspection of housing; supervision of swimming pools and other recreational facilities; inspection of milk, meat, fish and other foods; and sanitation of the working environment.

Most personnel engaged in these activities do not have a previous education in the medical sciences. They are graduates of relevant engineering or science programmes. Most of them will not even have had instruction in public health beyond high school level. They therefore not only require technical and scientific training in the field in which they are to work, but should also obtain at least an awareness of the health implications of their profession. They should further be taught how to be effective in a multidisciplinary team, where they will work alongside medical and other professionals.

The countries of the European Region show different levels of development and organization in fields such as sanitation, especially in rural areas. In many countries public health technicians working at local level have wide responsibilities. It is, of course, impossible for them to have expertise in all the aspects of sanitation that they will encounter in their work. They can, at most, have an overview of the problems that may arise. They should have ready contact with the local people, including the political elite, and sufficient insight to recognize when to refer a problem to a more specialized institute or expert. In most instances they work under the supervision of, or in close liaison with, the regional medical officer. In a few countries there exist schools of public health in which these professionals receive their basic training. In other countries, however, they are selected from among local technicians already engaged in such work; inservice training would help them obtain the public health competence they need.

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[a] Director, International Institute for Hydraulic and Environmental Engineering, Delft, Netherlands.

In countries at a more advanced stage of development the various public health functions are exercised by specialized organizations. Their staff mostly consist of graduates from schools of science or engineering. On recruitment, the latter should, in addition to a specific technical briefing, receive sound instruction on the public health aspects of their work.

Needs

In the last decade, new hazards for man or his natural environment have been identified continuously. They have sometimes received wide publicity in the mass media. Such fragmentary information is not sufficient for professional purposes. There is, therefore, a need for a continuous educational effort which will enable staff to act in the right way when faced with novel problems. Concurrently with the recognition of environmental health concerns, there has been a continuous flow of new equipment to monitor, analyse or control health risks. Manufacturers are very willing to give information on the advantages of their products, but maintenance of public health is too important an issue to leave in the hands of those with a commercial interest. The environmental health authorities should therefore be responsible for ensuring that education and information on equipment are available.

Types of continuing education

Continuing education of environmental health workers is organized in various ways. Schools of public health, or university institutes with special competence, are the most appropriate places for conducting courses. To ensure that such institutes have the necessary motivation, they should be adequately financed and staffed. If the scale of the country allows speedy travel to schools, courses can be given part-time. Where schools are far from the working place, courses of several weeks' duration are needed. Smaller authorities may, however, find it difficult to send their staff to the courses because of lack of replacements. Absence may be minimized by offering some instruction by correspondence, but preparation of the necessary material is a difficult task calling for capable manpower. Moreover, those parts of courses which involve laboratory or field work require the physical presence of students. A programme with correspondence courses should hence also provide for study periods in a teaching institute.

Curricula

A curriculum for continuing education should include practical exercises, which must be as close as possible to actual conditions. For manual technical work, educational institutions need workshops. Operations for

waste and water treatment can best be studied at pilot plants where the parameters governing a process can be varied. Using a full-scale treatment plant for instruction purposes may cause danger to the environment, and some experimental water and waste treatment facilities have therefore been set up for teaching and research. However, the high cost of such installations necessitates concentration at one or a few places in the country.

Many of those engaged in technical work will, at a later stage of their career, be involved in management. Good lecturers can transfer much insight and information in management sciences, economics, sociology and personnel administration. It is difficult, however, to get an adequate understanding of these subjects as applied to practical cases. Management games have been developed in which groups of students work together on realistic cases, where the various factors and their interaction can be simulated. Use of simple electronic computers makes it possible to deal with a relatively large number of variables. Students then acquire confidence that they will be able to work effectively by themselves.

The primary purpose of continuing education is to make health-related professionals more competent in their existing employment. Undertaking training at a later age involves, however, many sacrifices. It will only be possible to attract students if there is a satisfactory incentive. This may be higher remuneration or greater work satisfaction. For each worker, a career development plan should be drafted to clarify the possible outcomes of taking, or foregoing, opportunities for further education. These individual career plans should fit into an overall staff development plan. The organization and budgeting of continuing education should derive from the latter.

Evaluation

The main purpose of evaluation is to check whether each educative activity is still related to actual public health needs. It may seem attractive to a teacher who is highly competent in a subject to continue presenting it for a number of years in succession. Those responsible for programmes should, however, constantly monitor the relevance of each component. New health concerns and novel ways to deal with them, should be introduced immediately after they have become of importance, with no hesitation in cutting out material that has become obsolete or irrelevant. Introducing new material may be hampered by a lack of teachers with sufficient specific competence. Hopefully, WHO will in future have funds available to undertake studies on new problems as soon as they arise, and to publish the findings. The Organization's various technical reports and studies form a valuable input in continuing education for the health-related professions.

Special-purpose courses

Much that has been said in this paper on environmental health applies also to other health fields. The training of technicians for environmental, clinical, microbiological, and chemical laboratories requires much attention.

The need to prepare health workers for rare events, such as floods, earthquakes, conflagrations and explosions, is another issue demanding attention. It is sometimes difficult to maintain interest when the event in question has not occurred for a long time. Responsible authorities should therefore ensure that special-purpose courses are as interesting as possible and that some reward is given to participants.

Financing

Continuing education can be regarded as forming an integral part of professional training. More technical subjects could be omitted from college curricula if they were to be taken up at a later stage. Continuing education would then be financed from the normal education budget of the government. The consequent integration of provisions for continuing education into educational legislation and management might, however, reduce flexibility and delay adaptation to new needs. Continuing education for environmental health should preferably be funded and supervised by the health authorities. Where courses are aimed at higher competence in existing employment it is logical that the student should not bear the cost, but where they lead to promotion it would not be unreasonable to expect a financial contribution from the student. Continuing education for the liberal professions could be funded by professional associations who might receive a subsidy from the government for this purpose.

The best results in instruction may be obtained by professionals who teach as part of their main job, or in their spare time in return for special remuneration. For a number of subjects, however, especially where laboratory or field work is involved, it is indispensable to employ full-time teachers.

Annex 4

DEVELOPMENT OF CONTINUING EDUCATION IN SOCIAL WORK

Miss N. Kearney[a]

As with all aspects of social work training, it is difficult to summarize the situation regarding continuing education in the European countries as there is so much variation. However, it can be said that in general, since significant numbers of posts in social work are occupied by unqualified people, the emphasis is on providing sufficient resources for undergraduate training. This has meant that post-qualifying education has been somewhat neglected.

Nevertheless, there have been considerable developments in recent years and a number of patterns of continuing education have now emerged:

- 6-12-month full-time post-qualifying courses, such as those available in Sweden and the United Kingdom, designed to improve skills in fields such as family therapy, management, child psychiatry and community work;
- 2-4-week courses, during the summer vacation, as in Finland, which are sometimes "built on", in that the participants return in subsequent years for one or two further courses on the same topic; the areas covered are similar to those above;
- short seminars of 1 to 5 days, often organized by the national association of social workers or by groups of associations, e.g., the Nordic group or the European branch of the International Federation of Social Workers;
- inservice training, organized by employers;
- multidisciplinary courses, seminars and workshops involving other professionals.

All of these resources are useful in their own way and tend to be oversubscribed, especially the short courses where problems of secondment and financing are easily overcome.

It is interesting to note the difference in attitudes to continuing education among the professions. Far from demonstrating a reluctance to participate

[a] Lecturer in Social Work, Department of Social Studies, Trinity College, University of Dublin, Ireland.

in post-qualifying courses, social workers in general seem eager to avail themselves of every opportunity to develop their skills further. This willingness may be related to the philosophy of undergraduate social work training, where a heavy emphasis is laid on the importance of remaining abreast of new ideas and developments, and at the end of which newly qualified workers are considered to have completed merely the first phase of what should be a continuous process of education lasting right through their professional careers. Unfortunately this enthusiasm is not always shared by employing authorities, and in some countries the initiative tends to be left with the individual social worker who must convince his employer that participation in a particular course or seminar is not a luxury but essential if he is to improve his practice or update his method of working. Already in the United Kingdom it seems that 12-month post-qualifying courses are being reconsidered because of the difficulty in funding replacement staff; in other countries social workers have had to take unpaid leave to attend courses.

At present, then, the onus is on individuals, national associations and universities or schools of social work to provide continuing education in social work, sometimes without any guarantee that employing bodies will facilitate participation in the courses offered, and often without adequate consultation with government ministers and local administrations to ensure that they are relevant to present-day needs and problems. This is an unsatisfactory situation, which could be improved by increased cooperation between the various bodies involved. However, this first requires a commitment on the part of national governments to the idea of continuing education for the social work profession, and a realization that neglect of it, in order to concentrate exclusively on basic training, may well be a false economy.

Annex 5

EVALUATION: AN ESSENTIAL ELEMENT IN PLANNING AND IMPLEMENTING A CONTINUING EDUCATION PROGRAMME

Dr T. Fülöp[a]

Introduction

The ultimate purpose of continuing education has been defined as ensuring that the quality of preventive and curative care given by health personnel is at the highest possible level. It follows that any effort or educational programme in continuing education must ultimately respond to the following questions: is it actually leading to action by health personnel which improves health care? If so, is it achieving this objective in the most efficient manner (i.e., making sound use of scarce resources)? And, at a more individual level, is the personal performance of the health worker actually maintained or improved?

The importance of responding to these questions on the basis of reliable data hardly needs to be stressed here. There is increasing pressure for public accountability in regard to the vast resources being channelled into health services, and it is clear that this expenditure includes the great cost of education for the health professions. It must also be emphasized that evaluation is essential because feedback is one of the requisites for learning; without adequate diagnosis of personal deficiencies no remedial action will be taken by the health worker to improve his performance through continuing education.

Given the importance of evaluation it is perhaps surprising to find how little has been or is being done; how few serious attempts have been made to undertake systematic studies of the effectiveness and efficiency of continuing education and especially of its impact on the performance of health workers. While the present dearth of such studies is due in part to the complexity or difficulty of the evaluation process, it is essential that provision be made for them as an integral part of planning and implementation of programmes.

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[a] Director, Health Manpower Development, WHO, Geneva, Switzerland.

Clarification of terms

For convenience, the word "evaluation" will be restricted here to programme evaluation; the term "assessment" will be used when referring to individual students or health workers. Programme evaluation denotes a process of making *informed* judgements about the *character* and the *quality* of an educational programme or parts thereof.[a]

The term "informed" is used to indicate that the data on which judgements are based are reliable or, in other words, that the method of gathering information, and the sources and the quality of that information, can sustain critical analysis.

The use of the term "judgement" implies that decisions are arrived at by a process which involves the weighing of alternatives, the use of sound scales of comparison (criteria) and – most important – the consideration of all relevant data from as many sources as possible.

The term "performance assessment", on the other hand, refers to a generalization about the performance of an individual, derived from an observation of a sample of his behaviour. Again, it is essential that the information base for such a generalization is valid and reliable.

What impact may be expected from continuing education on the quality of health services?

If continuing education or, more importantly, continuous learning becomes an established feature of health services, it should follow that health workers will:

- continuously monitor and assess their own and their peers' performance, and detect shortcomings in the delivery of health care
- maintain and/or improve the level of performance in, and the quality of, preventive, promotive, curative and rehabilitative health care provided by them
- introduce new methods in their daily practice as soon as these are properly tested and proved to be efficient
- improve their efficiency and effectiveness in delivering health care
- work more efficiently in teams
- display a more appropriate and compassionate attitude towards the health and social problems of people for whose care they are responsible
- experience greater satisfaction in performing their tasks.

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[a] Katz, F.M. *Guidelines for evaluating a training programme for health personnel.* Geneva, World Health Organization, 1978 (WHO Offset Publication No. 38).

It should also follow from improvement of the quality of health care that the population's health status and the general satisfaction with health care will constantly improve.

A number of questions might be asked in order to assess the impact of continuing education on health care. For example, does the practitioner successfully identify health risk factors? If so, what does he do about them? Does he recognize disease early, and initiate proper treatment and monitoring? Does he establish plans for rehabilitation? Does he seek similar health risk factors and/or diseases in the family and the community? How does all this change as a consequence of continuing education? We have to admit that no data are yet in existence which would prove beyond doubt that there is a correlation between continuing education and change in behaviour leading to improved competence. Even less is there a proven correlation with better health care. There is thus no proof that what is "gained" by health workers is retained or translated into improved practice.

Clearly, there may be many reasons why the delivery of health care is imperfect, and only some of these are related to deficiencies in the practice of health workers. Even when there are such deficiencies, they need to be analysed. A health worker may *know* what to do, and how to do it, but for some reason he does not, or cannot, put his knowledge into practice. In this case continuing education might not be the appropriate remedy. Alternatively, the health worker may not practise correctly because *he does not know* how to do so. Only in such cases can one expect a direct impact from continuing education. There must be a proper educational "diagnosis" before the right educational "treatment" can be prescribed. This proper "treatment" may, for example, be an organizational measure, so that no effect whatsoever can be expected from continuing education. It can be said with all confidence that, even in the absence of irrefutable research evidence, an impact of continuing education on the quality of health care can be expected if emphasis has been laid on the "diagnosis" of real learning needs and on help to learners in improving their competence in areas of well-established deficiency. What the public is interested in is not the number of hours that health workers spend in continuing education courses, but improved quality of health care. This is where an impact is expected from continuing education and one must feel assured that further research will demonstrate a close correlation between *properly planned* continuing education and quality of health care.

Programme evaluation

To make informed judgements about the nature and quality of a continuing education programme, it is necessary to obtain adequate data on the context in which it is developed, its objectives, the students, the training process and the resources. The "effects" of the programme must be assessed

during and at the end of the training, during subsequent performance at work and, most importantly, in the long term in relation to health care.

These requirements are the same for all educational programmes, but in the case of continuing education particular emphasis must be given to measuring effect, i.e., performance on the job and impact on health care, and thereby on the health status and "consumer satisfaction" of the population concerned. The inherent problems are obvious, not least because so much of health care takes place in a "closed shop" setting. Hence, finding direct measures of improvement in practice is particularly difficult. Instead, it is often necessary to rely on indirect measures, i.e., to devise indicators from which inferences can be made. Some examples of such indicators are quality and quantity of drug prescribing, ordering and interpretation of laboratory and X-ray tests, and journal reading. Useful information can be collected on consumer satisfaction by interviewing patients -- an approach which is now becoming, at least in some countries, more and more accepted. These are examples only; much inventive genius is needed to identify other workable indicators.

Assessment of individual performance

The crucial problem for evaluators is: can and does the health worker who has participated in a continuing education programme perform the tasks of the job more satisfactorily than before? Here there are, in fact, two separate questions, subsumed by the terms "can" and "does". Generally it is possible to make an assessment of a health worker's ability to perform a task; it is more difficult, yet much more important, to find out whether he actually practises it.

The word "performs" focuses attention on the behaviour of a health worker, including both the ways in which he organizes, retains and *uses* specialized knowledge, and attitudinal and interpersonal aspects. Ideally, then, behaviour in this context encompasses the whole range of knowledge, skills and attitudes acquired through training as well as performance in practice. It follows that assessment of performance requires a different methodology to that commonly used in educational institutions for health personnel. It is no longer possible to use traditional examinations, which tend at best to assess a student's possession of certain items of information. Instead the purpose must be to ***assess application in a health care situation of all relevant knowledge, skill, values and attitudes.***

For this purpose it is essential that those responsible for the assessment have:

- a precise task analysis, i.e., information on what the health worker actually needs to do
- an analysis of what competences are needed to perform the tasks satisfactorily

– the necessary techniques (instruments) to make an accurate assessment of these competences and their application.

What needs to be done

Summarizing the above comments, a number of necessary actions can be identified.

(1) Evaluation of programmes, and assessment of performance of participants, must be key components of all continuing education. Their inclusion should be mandatory for those planning and implementing programmes, given that without such evaluation no judgement can be made as to the effectiveness, efficiency and possible impact of the training.

(2) For programme evaluation, and particularly for appraisal of impact, it will be necessary to develop further appropriate qualitative indicators of health care practice.

(3) Performance assessment must be an essential feature of all educational programmes. It involves assessment at different phases of the programme with a view to diagnostic, and subsequently remedial, actions and, in certain cases, for the purpose of certification (summative assessment).

(4) For performance assessment, it will be necessary to develop an appropriate methodology for appraisal of a health worker's proficiency in health care tasks. The methodology must take adequate account of the complexity of human behaviour, in terms of organization and integration of tasks. Human beings anticipate, produce mental plans to guide their functioning, monitor and review their plans, and adapt their performance to changes in the problems they face; hence, it is essential that assessments should not be concerned merely with separate, and often minute, elements of task performance, as they have tended to be.

How can it be done?

The major innovations needed to meet the requirements listed above will not be feasible without a strong commitment by all concerned, and a realization that if they are not brought about voluntarily by the health professions they are likely to be imposed by governmental authorities.

It may be appropriate here to indicate what WHO is doing to promote and implement evaluation.

As part of our medium-term programme in health manpower development, considerable emphasis has been given to encouraging the use of programme evaluation. Guidelines have been published to facilitate its implementation.[a]

In the area of performance assessment, a publication will shortly be available which not only outlines approaches, principles and necessary actions but also presents some 100 examples of instruments already developed and in use in various educational programmes throughout the world with special regard to training of primary health care workers. A number of contracts have been entered into with institutions such as the Regional Teacher-Training Centre in Sri Lanka, the Office of Medical Education Research and Development at the University of Michigan, and the Medical Centre of Postgraduate Education in Warsaw, to collate instruments and make an initial appraisal.

Attention is also focused on the development and testing of suitable indicators to be used in evaluating health manpower development generally and the performance of health workers specifically, again with special regard to primary health care workers.

These efforts of WHO can only be realized with the collaboration of Member States and, ultimately, educational institutions and individuals. It is essential that, for instance in the European Region, ministries of health and educational institutions take an active role in this development, that there is support for the research and development activity required, and that there is experimentation.

Appropriate forms of collaborative endeavour would be:

(*a*) identifying continuing education programmes in which programme evaluation could be conducted;

(*b*) establishing a task force or working group on programme evaluation and performance assessment;

(*c*) assisting in the necessary trial of procedures as these are developed;

(*d*) generally promoting the concept of evaluation as an essential factor in improving programmes and individual performance for the sake of better health care delivery and, through this, improved quality of life for the people.

The realization of this concept would contribute to achievement of the main social target of governments, international organizations and the world community in the coming decades: the attainment by all the citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life – or health for all by the year 2000.

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[a] Katz, F.M. *Guidelines for evaluating a training programme for health personnel.* Geneva, World Health Organization, 1978 (WHO Offset Publication No. 38).

Annex 6

LIST OF RESOURCE PERSONS

Temporary advisers

Miss N. Kearney, Lecturer in Social Work, Department of Social Studies, Trinity College, University of Dublin, Ireland

Dr Vassiliki A. Lanara, Associate Director of Nursing Services, Evangelismos Medical Centre, Athens, Greece

Professor L.J. Mostertman, Director, International Institute for Hydraulic and Environmental Engineering, Delft, Netherlands

Professor J. Parkhouse, Department of Anaesthetics, University Hospital of South Manchester, Withington Hospital, Manchester, United Kingdom

World Health Organization

Regional Office for Europe

Dr W. Fritsche, Regional Officer for Health Manpower Planning and Management

Dr A. Wojtczak, Director, Research, Planning and Human Resources

Headquarters

Dr T. Füllöp, Director, Health Manpower Development

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